Appraisal Environmental and Social Review Summary

Appraisal Stage

(ESRS Appraisal Stage)

Date Prepared/Updated: 03/23/2020 | Report No: ESRSA00402
**BASIC INFORMATION**

### A. Basic Project Data

<table>
<thead>
<tr>
<th>Country</th>
<th>Region</th>
<th>Project ID</th>
<th>Parent Project ID (if any)</th>
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<tr>
<td>Nepal</td>
<td>SOUTH ASIA</td>
<td>P170409</td>
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**Project Name**

Nepal Strategic Road Connectivity and Trade Improvement Project

**Practice Area (Lead)**

Transport

**Financing Instrument**

Investment Project Financing

**Estimated Appraisal Date**

3/24/2020

**Estimated Board Date**

5/20/2020

**Borrower(s)**

Nepal

**Implementing Agency(ies)**

Ministry of Physical Infrastructure and Transport, Ministry of Industry, Commerce and Supplies

**Proposed Development Objective(s)**

To improve the efficiency and safety of select transport infrastructure, improve the efficiency of cross-border trade, and strengthen capacity for road network management in Nepal.

**Financing (in USD Million)**

<table>
<thead>
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<th>Amount</th>
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<tr>
<td>Total Project Cost</td>
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### B. Is the project being prepared in a Situation of Urgent Need of Assistance or Capacity Constraints, as per Bank IPF Policy, para. 12?

No

### C. Summary Description of Proposed Project [including overview of Country, Sectoral & Institutional Contexts and Relationship to CPF]

This Project seeks to support Government of Nepal in improving its capacity and efficiency of trade and transport infrastructure and strengthening the institutions managing them. Specifically, the Project will support (a) trade facilitation, through augmenting infrastructure for transit management at key border crossing points, improvement of sanitary and phyto-sanitary (SPS) management, and knowledge and capacity building support for improving management of trade; (b) regional connectivity improvement, through capacity augmentation in two roads within
The World Bank  
Nepal Strategic Road Connectivity and Trade Improvement Project (P170409)

two critical corridors for trade and a safe corridor demonstration program; and (c) institutional strengthening of the National Road Safety Council and the Department of Roads, through inter alia developing and mainstreaming and road asset management, training and periodic maintenance of high traffic highways within the Strategic Road Network. Through these activities, the Project will also pilot or demonstrate ways to address four critical challenges plaguing the road sector, viz., sustainability, efficiency, climate impacts and road safety. The proposed interventions together are envisaged to enhance transport and trade connectivity of land-locked Nepal with and via its neighbours in the region, and in particular, improve the efficiency of goods transit between Nepal and India through reducing time and costs and also make it more safe and resilient. This Project contributes to increasing trade within the eastern sub-region of South Asia, where the gap between reality and potential has been acute, and is in line with the commitment of Bangladesh, Bhutan, India and Nepal (BBIN countries) in this sub-region to align and focus their interventions in selected priority areas including transport and trade facilitation.

D. Environmental and Social Overview

D.1. Project location(s) and salient characteristics relevant to the ES assessment [geographic, environmental, social]

The proposed project will support trade facilitation, regional connectivity improvement and institutional strengthening.

Under the regional connectivity improvement, the project will support the Department of Roads (DoR) in the improvement of the existing 94.7-km 2-lane Nagdhunga-Naubise-Mugling (NNM) Road on the pivotal North-South trade corridor connecting Kathmandu and Birgunj to a 2-lane Asian Highway standard and the upgradation of the 130-km Kamala-Dhalkebar-Pathlaiya (KDP) Road along the East-West Highway from a 2-lane to a 4-lane road. Under this component, the project will also support Periodic Road Maintenance.

For the trade component, the project will support the Ministry of Infrastructure, Commerce and Supplies (MoICS) and the Ministry of Agriculture and Livestock Development (MoALD) to implement trade facilitation interventions (e.g. collection centers with cold storage, customs stations, equipping and accreditation of selected laboratories as well as training and capacity building) to enhance trading and border infrastructure at selected in urban and remote locations.

The proposed project will also support strengthening of the DoR to improve its capacity for better management of the road assets, undertake periodic road maintenance and environmental & social risks and impacts, quality control, advanced designs and analytics that could help improve the investment planning, prioritization and allocation processes. It will also support E&S capacity building of MoICS and MoALD involved in implementing the trade component.

The designs and works for both NNM Road and KDP Road will have provisions for road maintenance as well as better management of climate change impacts, disaster risks and road safety-related issues and risks based on road safety audits conducted at the feasibility and design stages of both roads. Both the NNM and KDP Roads are existing roads constructed many decades ago. The NNM Road starts in Kathmandu District and ends in Chitwan District passing through populated areas, urban and rural communities, terraces, undulating cultivated lands and hilly and mountainous areas with a number of unstable slopes and active landslides. The main land use along the NNM Road is cultivated lands, punctuated by forests, human settlements and water bodies. Through the ESA, there are six IP groups with collective attachment to land in the project area of the NNM road, although outside the RoW. There are no protected areas, national parks and other environmentally-sensitive habitats along the NNM Road corridor. The
existing KDP Road, on one hand, has about 14km segment passing through the southern border of the Parsa National Park (PNP). This segment separates the buffer zone of PNP on one side with the private lands on the other side of the road. The PNP supports high biodiversity and wildlife such as Bengal tiger, Asian elephant, Chinese pangolin, sloth bear, striped hyena, barking deer and many more wildlife species. Within the 14km segment, three wildlife transboundary crossings have been identified. Five other wildlife crossings have been identified for the rest of the KDP road outside the segment that traverses the PNP. Majority of the land use in the KDP area is comprised of forest and agricultural lands and settlement areas. The periodic road maintenance works will be carried out in existing roads while the trade component will also be undertaken in existing selected Inland Clearance Depot sites in Biratnagar, Birgunj and Bhairahawa.

D. 2. Borrower’s Institutional Capacity

DoR is a long time client and partner of the World Bank and is quite familiar with the Bank’s safeguard policies and procedures. Currently, the department is implementing two IPF operations: the Road Sector Development Project (RSDP) and the Nepal-India Regional Trade and Transport Project (NIRTTP), and a hybrid “Program for Results” and IPF Bridge Improvement and Management Program (BIMP2). DoR also implements ADB-funded projects with similar requirements for safeguarding environmental and social impacts. It has established the Geo Environment and Social Unit (GESU) responsible for managing environmental and social aspects of its projects. The unit undertakes slope stabilization, implements wildlife passages and other protection measures in road projects and has sufficient experience in implementing ESMPs and RAPs in projects such as Narayanghat-Mugling (NM) Road financed under NIRTTP and RSDP. Despite this relative experience, both the DOR and GESU’s capacity and performance on key risks factors like occupational and community health and safety, labor influx, gender-based violence are quite weak and will be strengthened under this project. GESU currently has 5 permanent staff, and has a pool of consulting firms and individuals that are regularly deployed to conduct EIAs and IEEs of DoR projects. As part of the project preparation, a detailed E&S capacity and systems assessment of DoR vis-a-vis all E&S standards was has been completed using the draft Bank’s Guidance Note on Borrower Capacity Assessment. The assessment also drew from previous Environmental and Social Systems Assessment which was conducted for BIMP2. The results and recommendations of the assessment have been used to inform the E&S capacity building program to be financed by this project. The capacity building program will also extend to the trade facilitation component implementing agencies such as the Ministry of Infrastructure, Commerce and Supplies (MoICS) and the Ministry of Agriculture and Livestock Development (MoALD). For the Trade Facilitation component, the existing institutional set-up for E&S under the ongoing Bank-supported Nepal-India Regional Transport and Trade Project will be maintained.

The capacity building plan for the project will target GESU, DCID, MoICS and MoALD by hiring Environmental and Social Advisers for at least one year to be housed at GESU to deliver the trainings. Factoring in ongoing institutional capacity building from BIMP2, the plan is predicated on the principle of minimal organizational disruption, keeping the core staff lean, outsourcing, and the objective of providing adequate ES risk management for the SRCTIP program. In the immediate term, it will involve quick gap-filling measures to ensure that first batch of sub-projects under the program are managed adequately and to transition GESU to assume full responsibility for the next batch of projects in the program. These include: (i) Hiring of a Social Advisor, one Environmental Advisor and one Administrative Staff, to be detailed at GESU to take the lead in preparing and reviewing RAPs and IPDPs; and in developing TOR templates, review guidelines, audit checklists and protocols, and conduct or procure relevant trainings for GESU, DoR and other agencies staff; (ii) Hiring of one Social Specialist, one Environmental Specialist, one OHS specialist, and one Gender Specialist, at the SRCTIP Project Coordination Unit (PCU) to undertake the implementation of E&S management plans and provide data reporting support to GESU; (iii) Trainings on: (a) World Bank ESS compliant ESIA; (b) occupational and community health and safety; (c) Resettlement Action Plan; (d) Indigenous Peoples Development Plan and Free
prior informed consent; compliance monitoring and audit; (e) geo-technical assessment and bioengineering techniques; (f) biodiversity assessment and wildlife friendly road design; (g) tor preparation and consultant procurement and contract management; and, (h) key elements of the world bank ess; (iv) system enhancements on the following: (a) updating of the dor’s esmf to incorporate the requirements of the new world bank ess; (b) development of e&s screening checklist, scoping checklist and guidelines, eia tor template, eia review guidelines, rap review guidelines and monitoring and audit protocols; (c) enhancing the grm system established during bimp1; and (d) strengthening linkages with other agencies; and, (v) logistical support.

in the long term, measures to institutionally strengthen gesu to carry the program through and for the institutional change and capacity to permanently take hold in dor. among the measures being proposed include: (i) defining and/or affirming gesu’s functions to include the following: (a) review and approval of eia/iee, rap and other e&s risk management plans and instruments for dor projects; (b) conducting environmental and social compliance monitoring and audit of road projects; (c) administration of the dor grievance redress system; (d) provision of advisory services to various dor units regarding environmental and social risk management; and, (e) procurement and management of consultancy services related to the above functions; (ii) in order to ensure that contractors comply with the requirements under the e&s risk management plans: (a) environmental and social mitigation measures, including ochs standards based on recognized good international industry practice and wbegh guidelines, that are the responsibility of the contractor shall be reflected in the bidding documents and included in the bill of quantities; (b) gesu shall be represented at any pre-bidding conference with prospective contractors; (c) gesu shall take part in the review of winning bidders; and, (c) gesu shall be part of the inspectorate team to validate contractor’s work on the ground; (iii) gesu will be placed directly under the office of the dor director general; (iv) each gesu staff shall be aware of the techniques and technologies of bioengineering and wildlife friendly design and maintain a pool of consultants and experts with dor and outside; and, (vi) the system (i.e. templates, forms, guidelines and processes) established under the srctip shall be mainstreamed in dor’s operation.

ii. summary of environmental and social (es) risks and impacts

a. environmental and social risk classification (esrc)

environmental risk rating

the environment risk rating for this project is assessed to be high due to the project’s potential impacts on biodiversity, natural habitats and wildlife mobility and transboundary movement, road works triggering and/or exacerbating landslides in unstable and landslide-prone areas and health & safety risks to workers and communities during the construction phase of the project. the existing kdp road has about 14km segment passing through the southern border of parsa national park (pnp). this segment separates the buffer zone of pnp on one side with the private lands on the other side of the road. along the 14km stretch, three wildlife transboundary corridors have been identified. another five wildlife corridors have been identified in kdp road outside the 14km stretch that passes through pnp. the pnp is known to be of high biodiversity values with some wildlife and avifauna species considered critically endangered and endangered recorded in this national park. the nnm road, on one hand, is located in a number of active landslide areas and unstable slopes. there are no critical habitats, protected areas and other environmentally-sensitive areas along the nnm road corridor.
While the KDP Road is existing and built without any provisions for wildlife passes, its improvements and widening could potentially affect natural habitats, biodiversity and transboundary wildlife migration if no passages and fences are constructed especially along the wildlife crossing points/corridors identified. Road widening works in KDP Road can also further fragment forest habitats and could potentially affect critical habitats falling under the definition of ESS6 that maybe present in the project area, although works will be carried out in the existing ROW and the area to be affected by the works is small. On one hand, works at NNM road could trigger and/or induce landslides in unstable slopes and active landslide areas. During construction, health & safety issues of workers and communities and potential increase in road or traffic-related accidents especially along the NNM road, which is the main road connecting Mugling to Kathmandu, will be a key risk. There will also be cutting of trees along the ROW, to the extent that they cannot be avoided though further habitat fragmentation is not expected. Also in NNM Road (and highly likely KDP Road as well), demand for stone and aggregates could induce increased quarrying leading to landslide and erosion risks. Several road side settlements will be exposed to noise, dust, air pollution and safety risks. Works related to trade facilitation activities are not expected to have adverse environmental impacts since these are small to medium scale works mainly involving improvement of existing structures. Period road maintenance works are assessed to be low to moderate risk since works involved are minor and will be carried out in existing roads and within the ROW. That said, occupational and community health and safety during construction, however, will need closer attention as this is proving to be a systemic issue in Nepal that needs significant improvement.

During operation, it is expected that impacts will mainly be positive on the economy with increased regional trade between Nepal and India. Traffic-related safety is also expected to improve with the safety features of the improved and/or widened roads and enforcement of road safety rules, which will also be supported by the project. And finally, with the construction of wildlife passes, fences, including guiding fences, and other measures to be proposed and implemented based on the biodiversity management plan, along the KDP Road it is expected that wildlife collision will be minimized and connectivity will be facilitated, thus creating beneficial impacts to wildlife and biodiversity.

Social Risk Rating

High

The social risk rating for the proposed project has been assessed to be “High” due to the significant number of households expected to be physically displaced for road expansion related to the KDP road and proposed civil works under the trade facilitation component. A RAP has been prepared for NNM road and indicates that a total of 78 households will be affected by road improvements. Feasibility studies for the KDP road is underway, as such the scale and magnitude of involuntary resettlement impacts can not be identified at this preparation stage. Nonetheless, the proposed widening of the road from 2-lane to 4-lane will likely affect a significant number of households living and petty trading (e.g. tea shops, fruit and vegetables stalls, and small grocery markets) along the RoW of the road. During the construction of the roads, the potential for labor influx, health and safety concerns and gender-based violence (GBV) is expected. Traffic safety risk is likely to be high along the NNM road, which is the main road to Kathmandu. However, if the project is able to manage these risks to a satisfactory level, it is expected that it will produce a number of positive impacts on the local, national and regional economy with increased regional trade between Nepal and India. Whilst the DoR and other implementing agencies are familiar with, and have some modest experience in implementing World Bank’s safeguard policies, the Institutional capacity assessment revealed some shortfalls. The proposed project is the first project for DoR that applies the ESF with its expanded scope of risks and significant demand for due diligence. Some E&S staff/consultants of the implementing agencies participated in ESF training, some did not. DoR lacks experience in managing labor influx issues and FPIC (in the case of IPs). The Trade Facilitation component of the project is yet to identify and finalize the subprojects it will support. In the meantime, such sub-projects may involve land acquisition and may potentially cause impacts to IP communities. As indicated above, the
The client lacks sound experience in addressing issues related to IPs. The project Road Periodic Maintenance activities will be finalized during project implementation, however, due to the nature of the project, the social impacts caused will not be significant.

B. Environment and Social Standards (ESSs) that Apply to the Activities Being Considered

B.1. General Assessment

ESS1 Assessment and Management of Environmental and Social Risks and Impacts

Overview of the relevance of the Standard for the Project:

For the NNM Road, a detailed Environmental and Social Impact Assessment (ESIA), Resettlement Action Plan (RAP) and Indigenous Peoples Development Plan (IPDP) have been prepared following the World Bank's Environmental and Social Standards. Given that the KDP Road is at feasibility stage, an upstream Environmental and Social Assessment (ESA) has been conducted covering the RoW of 360km Kakarbhitta-Pathlaiya Road Section that also covers the Kamala-Dhalkebar-Pathalaiya (KDP) Road section of the East West Highway. The ESA noted the potential for the project to cause the following impacts: (i) modification of biodiversity, disruption of wildlife mobility and transboundary migration at eight wildlife crossing points with the improved serving as a barrier for wildlife movement; (ii) vegetation clearing and removal of trees during construction which may induce fragmentation of habitats along some sections of the KDP Road; (iii) health & safety of workers and communities along the footprints of road works and the transport routes of construction supplies and equipment; (iv) exposure of populations along the ROW and transport routes to noise, dust, vibrations, air pollution and traffic-related risks; (v) siltation and sedimentation of waterways close to the construction sites; (vi) landslides resulting from works and vibrations in landslide-prone areas and unstable slopes; (vii) land acquisition along the ROW; (viii) physical and economic displacements along the ROW; and, (ix) increase risks of gender-based violence. Most project workers in Nepal tend to migrate from outside the project areas. Thus, labor influx and its associated social issues may pose a serious risk to the project. During operation, E&S impacts are largely expected to be positive with increased trade and economic activities and safer roads as well as allowing transboundary wildlife migration with the construction of wildlife-friendly passes along the eight wildlife crossing points identified in the ESA.

Specifically for the NNM Road, the corridor area is already fragmented and highly disturbed as a result of human population growth, encroachment and establishment of new settlements along the highway, land transformation, agriculture development and other associated development issues. Surrounding rural roads have been constructed in recent years, often without environmental considerations. Increased density of the road network and lack of protective measures may aggravate the adverse impacts on environment such as siltation and sedimentation of rivers, increased barrier effect for wildlife movement, threat of poor water drainage and community health and safety. The impacts might be exacerbated by climate change and uncoordinated local development that may cause significant economic losses. The improvement of NNM Road will affect 10 households considered as vulnerable and disadvantaged, including IPs (4), women-headed households (4) and Dalits (2). The ESIA, RAP and IPDP for NNM Road had been previously prepared under Safeguard policies and have been retrofitted to meet the requirements of the ESF and to manage the assessed E&S risks and impacts following the mitigation hierarchy.

For the KDP Road, the ESA that has been completed will inform site-specific ESIA to be conducted when the detailed design of the road is complete. A Biodiversity Assessment was also conducted for the KP Road that includes the KDP Road segment and has been integrated into the ESA. A preliminary cumulative impact assessment (CIA) was also
conducted as part of the ESA, and suggest that some significant cumulative impacts along the East West Highway are likely. One of the large scale projects financed by the GoN, the Fast Track Road, connects to the KDP road while the Nijgadh International airport is near to the KDP road. Therefore, cumulative impacts on environment and social aspects is an increasing trend and may cause impacts on biodiversity and wildlife movements, disturbance on environmentally sensitive habitats, vegetation loss, over extraction of construction materials, encroachment of land, rapid urbanization, competition on local resources etc. A Strategic Environmental and Social Assessment will be conducted for the entire East West Highway, including cumulative impact assessment, during the implementation of the project to assess long term and cumulative risks and impacts of all completed, ongoing and future development in the East West Highway. The SESA will be used to engage a wide array of stakeholders to come up with and implement well-coordinated solutions and management plans to these long term and cumulative E&S risks related to the upgrading of the entire Mahendra Highway/East West Highway. As mentioned, a detailed ESIA and site-specific ESMP will be conducted for the KDP Road at the detailed design phase. The detailed ESIA will also include a detailed Biodiversity Assessment and Management Plan.

The trade facilitation component will likely have moderate to substantial environmental impacts given that most of the subprojects will involve rehabilitation and improvements of existing infrastructure. There may be land acquisition and involuntary resettlement, which will be assessed during the preparation of the subprojects. For the periodic road maintenance, risks and impacts are assessed to be low to moderate given that maintenance works are minor and will be confined only within the existing roads and RoW. However, based on experience in Nepal, occupational and community health and safety will be a risk in the trade component and periodic road maintenance works given Nepal’s overall weak performance and track record in managing these issues.

The ESIs and other related assessments and plans for both NNM and KDP Roads, periodic road maintenance and Trade Components have paid and will continue to pay particular attention to assessing the risks and impacts to disadvantaged and vulnerable groups. The findings of the ESIA and ESA, Bank’s GBV Risk Assessment Tool and other assessments have been used to guide the identification of GBV risks and the subsequent development of the GBV Risk Mitigation Action Plan. Other documents prepared and disclosed include the ESMP for the periodic road maintenance, RPF and IPPF for DOR; ESMF, RPF and IPPF for the Trade Facilitation Component; and Environmental and Social Commitment Plan, the Stakeholder Engagement Plan and Labor Management Procedures covering both the NNM Road and KDP Road, and separately for the Trade Component.

ESS10 Stakeholder Engagement and Information Disclosure

Under the NNM Road project, several rounds of public consultations were conducted during project preparation. The key identified stakeholders are: local governments (2 municipalities (M) & 5 rural municipalities (RM)), local Non-Governmental Organizations (NGOs), civil society, teachers, political leaders, women groups, local entrepreneurs led by women groups, vulnerable and IPs, differently-able people and marginalized groups, local business groups and suppliers (such as United Cement, Kepy Cement, Gas bottling plant and Stone crusher plants etc), local user groups (forest, water, irrigation etc), local journalists, security personnel (traffic police and army), travel agency, drivers and road users (including travelers). The discussions during preliminary study (pre-feasibility) were organized to share information to the local people of project-affected wards of RM/M. An initial walkover survey was carried out
followed by individual interviews with local government officials. Additional tools such as Focus Group Discussions (FGD) and Key Informant Interviews (KII) were used to conduct discussions. Preliminary consultations during prefeasibility stage were carried out at three different locations, Dhunibesi M, Gajuri RM and Benighat Rorang RM from 27-30 January, 2017. A total of 115 participants took part with 104 males and 11 females. The participants were only from the indirectly affected groups. Then, public hearings were carried out at the four different locations of Dhunibesi M, Galchi RM, Benighant Rorang RM and Ichhankamana RM with 259 participants (228 male and 31 female). Supplementary consultations were carried out at 22 different locations of the affected RM/M focusing on female groups (210 females and 86 males, out of 296 participants) in June 2018. Additional consultations with the specific groups such as women, vulnerable/IPs, project affected parties, other interested parties were carried out during May-November, 2019 to fill gaps present in the consultations with direct affected groups (project affected vulnerable groups and IPs), and other interested parties (broader and general groups) there were still present after the public hearings and supplementary consultations. The total participants of additional consultations were 252 (female- 171, male- 81). The agenda for discussions were impacts on private/public structure, common property and public utilities along with cultural heritage including Grievance Redress Mechanism (GRM) and GBV-related issues. The key issues raised during consultations were: compensation of impacted land, affected private and public structures, construction of public structures such as foot over bridges near schools and major market places, construction of vegetable collection centres, gender-friendly public toilets with refreshment centres, landslide risks during construction of road establishment of ward level, GRM, ensuring priority for local employment (including females) and stakeholder engagement during road upgrading works.

For KDP Road, the Feasibility study has just started. Consultations were carried out through informal interactions, group discussions, and key informant interviews in different communities of affected wards. Stakeholder groups who were consulted include: National Park Authority, Community Forest User Groups, School Management Committees, Local governments, local NGO’s, teachers’, women groups, vulnerable and disadvantaged groups, local suppliers, and local user groups. In total 13 public consultation meetings were conducted. More than 203 individuals from different groups took part in the consultations. During consultations, the major issues raised included: land acquisition and compensation; crossing mechanisms; the time period for construction; the speed of vehicles after the road upgrading; impacts and/or loss of private and public structures, utilities and cultural heritage; safety measures throughout the alignment; construction of embankments; river training and drainage management. Communities along the project area have shown their commitment to support project activities. Some of the local people are interested to engage themselves as skilled and unskilled workers during the upgrading works. Moreover, local people suggested minimizing the loss of cultivated land and structures to the extent possible.

Stakeholder Engagement Plans (SEP) were prepared, one covering the NNM Road and KDP Road projects and one separately for Trade Facilitation component, which will guide the consultation processes and stakeholder engagement throughout the life cycle of the project, starting from preparation through to implementation. During the ESIA exercises, stakeholder mapping will be conducted which will identify stakeholders of the project including trade facilitation component.

B.2. Specific Risks and Impacts

A brief description of the potential environmental and social risks and impacts relevant to the Project.

ESS2 Labor and Working Conditions
The proposed project will involve direct workers, contracted workers and primary supply workers mainly from quarries and supply of aggregates both for the road works and the trade facilitation component. A significant number of contracted workers during construction (at least 1000 for the NNM Road) is expected to be employed by contractors. In Nepal the usual practice is to source labor from outside the project areas because of shortage of local labor, thus labor camps for contracted workers are anticipated.

Amongst the issues identified in the ESIA for the NNM Road and the ESA for the KDP Road include poor working conditions in workers' camps, non-payment of wages and benefits, discriminatory employment practices, child labor, forced labor, human trafficking, Occupational Health and Safety (OHS) issues including workplace accident, grievances related to workers, and GBV, which are all common problems in Nepal. Contracted workers are more susceptible to these risks.

Labor Management Procedures (LMP) have been developed, one covering the NNM Road and KDP Road projects and one separately for Trade Facilitation component, and a standalone worker-specific GRM (for direct and contracted workers) will be established. The LMP identifies the main labor requirements (how different categories of workers will be managed, in accordance with the requirements of national laws and ESS2) and risks associated with the project, and determines the resources necessary to address labor issues, including risks of child labor and forced labor.

To ensure the health and safety of workers during the construction and operational phases of the project, DoR, MoICS and MoALD will require contractors to prepare and implement their Occupational Health & Safety Plans (OHSP) following the World Bank Group Environment, Health and Safety (EHS) Guidelines (for construction activities) and Industry Sector Guidelines for Construction Materials Extraction and Good International Industry Practice. The OHSP will include procedures on incident and accident investigation and reporting, compulsory use of PPEs, recording and reporting of non-conformances, emergency preparedness and response procedures and continuous toolbox training/awareness. These requirements will be spelt out in the bidding documents and work contracts.

The GBV risks for the project has been assessed as “substantial”, using the Bank’s GBV Risk Assessment tool. To minimize GBV risks, a GBV Risk Mitigation Action Plan has been developed for the NNM Road and KDP Road. The Plan includes requirement for awareness on this issue, a Code of Conduct signed by contracted workers, zero-tolerance signs inside worksites, survivor centric referral mechanisms for GBV response, and budget allocation.

ESS3 Resource Efficiency and Pollution Prevention and Management

The project’s risks and impacts on sensitive receptors within and close to the ROW, transport routes and works for the trade facilitation component will be of significance during construction. During construction, air emissions will include exhaust from heavy vehicles and machinery, and fugitive dust generated by construction activities. Noise and vibration from earth works are also expected to be generated. Those expected to be affected are those people living within proximity to the construction sites and along the corridor and transport routes. Construction is also expected to generate solid and liquid wastes, which will primarily include excavated soil and hazardous waste such as hydrocarbon oils from construction machinery and vehicles. Requirements for construction materials will also entail extraction of more resources from existing areas and may open up the door for opening new areas although this will
be closely monitored and regulated under the project by requiring contractors not to open new areas that are relatively of natural conditions. Water requirements will also be significant although it would not be an issue for the construction of NNM road, which will source water mainly from the big Trishuli River. Water requirements and sources for KDP Road will be assessed in detail in the ESIA.

The ESIA/ESMP for the NNM Road has generic and specific provisions to manage risks relevant to this standard during construction and operational phases. For example on sand and gravel extraction, Contractors will be prohibited from opening new areas along Trishuli River for extracting and/or sourcing sands, gravels, stones and boulders. They will also be prohibited from extracting and/or sourcing materials in sections of the Trishuli river that remain in relatively good natural conditions and areas that support fish of conservation importance such as the Golden Mahseer. Contractors will not be allowed to extract, source or collect sand, gravel and boulders within 5-10 m distance of the left embankment of the Trishuli River. Not more than a depth of 1m of excavation will be allowed while mining. All contractors will be required to submit their Construction Materials Sourcing Plans to the PIU, CSC and the World Bank for prior approval before carrying out material extraction. No material extraction will be done by any of the Contractors until the Materials Sourcing Plan is approved by the PIU, CSC and the World Bank. The PIU and CSC will regularly monitor material extraction to ensure proper implementation of the Materials Sourcing Plans. A Waste Management Plan will also be required from the contractors.

While greenhouse gas (GHG) emissions from the project are expected to not be substantial given the rehabilitation nature of the works, GHG emissions were calculated for the NNM Road and is estimated at 142,587 tons annually. The GHG emissions for the KDP Road will be calculated during the ESIA. For the periodic road maintenance and trade components, GHG emissions are expected to be insignificant and would not warrant separate assessments/calculations.

**ESS4 Community Health and Safety**

Construction activities expose communities to health and safety risks especially those that are close to the construction activities and along the corridor and transport routes. Expansion of the corridor and road works expose communities to health and safety risks from increased traffic and influx of labor during construction and operation along the corridor and transport routes. Community access will also be affected. This disruption in movement would cause inconvenience to the local communities albeit temporarily. Traffic management plans will be put in place to address these inconveniences and safety risks. For all the construction work, the ESMPs will require contractors to install a safety system around the project sites (fences and safety guards) during the entire construction period. When works take place on open roads, equipment and vehicles will be brought together to one single well-secured laydown area during the night to ensure both community and worker’s safety. In addition, the road design will also consider improving accessibility for people with disabilities. A Community Health & Safety Plan will be required from contractors, which will also include procedures on incident investigation and reporting, recording and reporting of non-conformances, emergency preparedness and response procedures and community awareness raising activities.

During operation, road safety and community health and safety are anticipated to significantly improve with the installation of safety features on widened roads. That said, community health and safety measures during operation
will be included in the training program for DoR and in their standard operating procedure for road operation and maintenance.

Potential impacts caused by labor influx to communities were assessed and action plans to address such impacts are included in the ESMP. The findings of the ESIA and ESA, Bank’s GBV Risk Assessment Tool and other assessments have been used to guide the identification of GBV risks and the subsequent development of the GBV Risk Mitigation Action Plan for the NNM Road and KDP Road.

**ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement**

Land acquisition requirements for the improvement of the NNM Road have been reduced significantly by optimizing the existing ROW and dropping the proposed bypasses which would have involved substantial land acquisition. A total of 78 households will be affected by NNM Road improvement. Private land which will be acquired for the NNM Road improvement, a total of 0.2 hectares, is not significant. Some 6,500 m² of private and public structures will be relocated. A Resettlement Action Plan (RAP) was prepared according to ESS5 to address the project impacts. Several rounds of public participations have been conducted with project-affected people, and compensation rates proposed are based on replacement cost.

As the KDP Road project has only just commenced feasibility studies and detailed design has not started, resettlement impacts cannot be determined. However, as the road upgrading will be undertaken within the existing ROW, land acquisition is not expected. Road expansion and construction works are likely to affect a significant number of households involved in petty businesses that include tea shops, fruit and vegetables stalls, and small grocery markets. A detailed assessment of resettlement impacts will be undertaken as part of preparing the ESIA and RAPs when detailed designs are complete. A Resettlement Framework (RF) prepared will guide the preparation of the RAP during detailed design.

The Trade facilitation component is yet to be finalized, however, involuntary resettlement is expected. A RF was developed to guide the procedures that the client will follow and the technical requirements for RAP preparation during detailed project design. According to the project proposal, no additional land acquisition will be need for Road Periodic Maintenance activities.

**ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources**

The habitats in the ROW and in surrounding areas of the NNM Road is already fragmented and anthropogenic pressure on the area is very much prevalent due its long history of agricultural development and human settlements. The ESIA indicated that the project zone of influence (i.e., within the 50-m ROW, 300-m Direct Impact Area from the center of the road and 2-km radius Indirect Impact Area) has the recorded presence of critically endangered and endangered species of animals and plants within the remaining forest patches along rivers and streams, which are within the 2-km indirect impact area but outside the ROW and the direct physical footprint of the project or in the 300-direct impact area. The ESIA further indicated that the improvement of the existing NNM road will only affect a total of 4 hectares scattered along the entire ROW out of 57 hectares of forest. The direct impact involves the cutting
of a total of 52 trees and some poles. The physical works itself within the ROW is assessed to not adversely impact on habitats for critically endangered and endangered animals given the small vegetation clearance involving 52 trees and some poles along the ROW. In addition, there are also no protected areas, wildlife reserves or wildlife migratory corridors along the NNM road. To meet the requirements of the GoN for tree cutting, the project will replant 25 trees for every mature tree cut in an area designated by the Forest Department.

Parsa National Park (PNP) is within the KDP segment of the KP road corridor. Specifically, about 14 km of KDP Road is on the southern border of PNP, which separates the park from private lands from one side of the road to the other. As a segment of the KDP Road is along the border of the park, there are risks and impacts of the road works on PNP. Specifically, eight wildlife crossing points/corridors are found in the entire stretch of KDP Road, three of these corridors are within the PNP. Thus, if road works are not planned, implemented and managed properly, there will be impacts on wildlife movement and transboundary migration, increased poaching during construction that could contribute to the decline in local population of critically endangered and endangered species. The road itself, despite its presence for many decades now, may have served and could continue to serve as barrier for wildlife movement, which could adversely impact on their population. Vegetation clearance along the RoW and widened road could also contribute to habitat fragmentation in the park. As documented in the baseline, PNP has critically endangered species and endangered species of mammals and birds. It also has avifauna, reptilian and amphibian species, has natural habitats and is likely to have critical habitats that could potentially be impacted by the project. The existing KDP Road segment has no wildlife crossings to allow wildlife movement from one side of the road to the other. Eight wildlife crossings/corridors have been identified in the KDP Road, of which three are within the Parsa National Park and five outside but along the Community Forest, Collaborative Forest and Government Managed Forest area. These identified wildlife crossings will be installed with wildlife passes and fences to facilitate wildlife movement and transboundary migration and to minimize wildlife road kills.

A comprehensive biodiversity assessment, including critical habitat assessment, will be carried out as part of the ESIA at the detailed design stage of the KDP road. A Biodiversity Management Plan (BMP) will be developed following the mitigation hierarchy. The BMP will inform the conservation and protection measures, including the design and specific locations of the wildlife passages and fences, offsets, where needed, which will be included in the design and implementation of the KDP Road. The PNP, the WWF and relevant government agencies with mandated role on biodiversity conservation will be consulted and their advice solicited on the BMP, including the design and locations of the wildlife passages and fences. Good experience from implementing the wildlife passages for the Narayanghat-Mugling Road under NIRTTP, the first of its kind in Nepal, will also inform the design, construction and operation & maintenance of the wildlife passages in the KDP Road. Based on WWF-Nepal’s monitoring program, these wildlife passages have been effective in allowing mobility of small to medium-sized mammals and that for big mammals like elephants wildlife passages have to be designed properly by qualified wildlife expert in close coordination with the design engineers, WWF-Nepal, Wildlife and Forestry Departments, National Park Authority and Community Forest Groups. For trees that will be cut, re-plantation will be undertaken in compliance with the National requirements. The re-plantation site will be agreed with the Department of Forest.

The trade facilitation component and periodic road maintenance works are not expected to affect biodiversity and living natural resources since the activities are mainly rehabilitation and improvement of existing infrastructure. Any new infrastructure that will have adverse impacts on biodiversity and living natural resources will not be supported.
ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities

There are IP communities, as defined by ESS7, present in the project area. Under the NNM Road component, the project area traverses Kathmandu, Dhading, and Chitwan districts as well as Chandragiri and Dhunibeshi municipalities and Thakre, Galchhi, Gajuri, Ichchhakamana rural municipalities. The major settlements include Khanikhola, Naubise, Dharke, Mahadevbesi, Galchi, Gajuri, Baireni, Majhimatar, Malekhu, Benighat, Charaudi, Kurintar, Ramailo Danda, and Mugling. Six IP communities namely Newar, Gurung, Magar, Tamang, Chepang and Bhujel have collective attachments to the project area. However these groups are all outside the NNM Road RoW where the project interventions will take place. Based on assessments and due diligence, the project will not cause any adverse impact to their land, will not cause any relocation of IPs from land they customary use or occupied and will not cause negative impacts to their cultural heritage. The potential impacts to these IP communities will be the risks of Labor influx, GBV and traffic safety. Therefore, according to the requirements of FPIC under ESS7, the FPIC is not relevant in this instance. Instead, an IPDP has been prepared according to ESS7 with adequate measures to address potential impacts to these IP communities.

Indigenous groups may be present in the KDP corridor. However, given that the feasibility study has just started recently and detailed designed has not yet commenced, it cannot be determined whether there are any IP groups which have collective attachment in the KDP project area, and the project’s potential impacts on these IP groups if any cannot be determined. This will be assessed during preparation of the ESIA as part of detailed project design. An Indigenous Peoples Planning Framework (IDPF) has been prepared to guide the preparation of an Indigenous Peoples Development Plan (IPDP) to address any impacts to IPs groups identified. Free, prior and informed consent (FPIC) with indigenous communities will be undertaken, if required based on findings of the ESIA.

Wholesale markets or produce collection centers and land custom stations will be constructed under the trade facilitation component. The locations of these civil works have not yet been determined. Road periodic maintenance activities are also yet to be finalized. Therefore, whether there will be IP groups present in the areas selected for these works or not is not clear yet. An IPPF was prepared during project preparation to guide the IP screening, public consultation and IPDP preparation. Whether FPIC is needed for these components or not will be based on findings of the ESIA to be prepared during detailed design.

ESS8 Cultural Heritage

The improvements in NNM Road will only affect 3 small newly-constructed temples/shrines. In stakeholder consultations, the local community advised that these temples do not hold significant cultural significance and can be relocated to nearby public land. The relocation of these small temples are included in the RAP for NNM Road. No other tangible and intangible cultural heritage were recorded in NNM road based on the ESIA.

For KDP Road, there may be tangible and intangible cultural heritage, including shrines and graves, which may be affected during the KDP Road upgrading. However, as detailed design for the KDP Road has not yet commenced, the presence of cultural heritage cannot be determined at the project preparation stage. This will be determined during
preparation of the ESIA for the KDP Road. Similarly, presence of cultural heritage under the Trade Component will be determined during preparation of the ESIA.

In both NNM and KDP Roads, Trade Component and Road periodic maintenance, chance procedures are included in the relevant ESMP, and in works contracts.

ESS9 Financial Intermediaries
The proposed project will not involve financial intermediation.

B.3 Other Relevant Project Risks
Nepal is currently shifting to a federal system of government, where functions are decentralized to local governments. It is still unclear how the new system will unfold but this does pose some governance and institutional risks especially as local government units capacity is limited.

C. Legal Operational Policies that Apply

**OP 7.50 Projects on International Waterways**
The project will not affect international waters

**OP 7.60 Projects in Disputed Areas**
The project is not located in disputed area

### III. BORROWER’S ENVIRONMENTAL AND SOCIAL COMMITMENT PLAN (ESCP)

<table>
<thead>
<tr>
<th>DELIVERABLES against MEASURES AND ACTIONs IDENTIFIED</th>
<th>TIMELINE</th>
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<tbody>
<tr>
<td>ESS 1 Assessment and Management of Environmental and Social Risks and Impacts</td>
<td></td>
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<tr>
<td>The following EA instruments have been prepared, consulted and publicly disclosed:</td>
<td></td>
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<tr>
<td>ESIA for the NNM Road based on the feasibility study and detailed design</td>
<td>01/2020</td>
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<tr>
<td>ESA for the KDP Road based on pre-feasibility study</td>
<td></td>
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<tr>
<td>ESMF for the Trade Component</td>
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<tr>
<td>ESMP for the Periodic Road Maintenance</td>
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<tr>
<td>Comprehensive ESIA for the KDP Road based on final design and road alignment</td>
<td>06/2021</td>
</tr>
<tr>
<td>ESIA/ESMP for the Trade Component</td>
<td>06/2021</td>
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<tr>
<td>Strategic Environmental and Social Assessment, including Cumulative Impact Assessment, for East-West Highway. The SESA will assess the long term and cumulative impacts of the upgradation of the entire 1028-km East West Highway that includes the 130-km KDP road and future engagement of the</td>
<td>12/2021</td>
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<td><strong>ESS 10 Stakeholder Engagement and Information Disclosure</strong></td>
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<td>Stakeholder Engagement Plans</td>
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<td><strong>ESS 2 Labor and Working Conditions</strong></td>
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<td>Labor Management Procedures, including Workers GRM</td>
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<td>Contractors' OHS Plans</td>
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<td><strong>ESS 3 Resource Efficiency and Pollution Prevention and Management</strong></td>
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<td>Contractors' ESMPs</td>
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<td><strong>ESS 4 Community Health and Safety</strong></td>
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<td>Contractors' ESMPs</td>
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<td>Gender-Based Violence Risk Mitigation Action Plan for the project</td>
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<td><strong>ESS 5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement</strong></td>
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<tr>
<td>Resettlement Action Plan for NNM Road</td>
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<tr>
<td>Resettlement Policy Framework for KDP and Trade Facilitation Component</td>
</tr>
<tr>
<td><strong>ESS 6 Biodiversity Conservation and Sustainable Management of Living Natural Resources</strong></td>
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<tr>
<td>Biodiversity Assessment, including critical habitat assessment, and Management Plan for the KDP Road</td>
</tr>
<tr>
<td><strong>ESS 7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities</strong></td>
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<tr>
<td>IPDP for NNM Road</td>
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<tr>
<td>IPPFs for KDP, Period Road Maintenance and Trade Facilitation Component</td>
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<td><strong>ESS 8 Cultural Heritage</strong></td>
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<td>Chance Find Procedures in the ESMP</td>
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<td><strong>ESS 9 Financial Intermediaries</strong></td>
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**B.3. Reliance on Borrower’s policy, legal and institutional framework, relevant to the Project risks and impacts**

*Is this project being prepared for use of Borrower Framework?* No
Areas where “Use of Borrower Framework” is being considered:
The use of Borrower Framework is not considered for this project although the project will meet both the requirements of GoN and the relevant World Bank standards.

IV. CONTACT POINTS

World Bank
Contact: Sri Kumar Tadimalla  Title: Senior Transport Specialist
Telephone No: 5770+6181 /  Email: stadimalla@worldbank.org
Contact: Deepak Man Singh Shrestha  Title: Senior Transport Specialist
Telephone No: 5770+6125 /  Email: dshrestha@worldbank.org

Borrower/Client/Recipient
Borrower: Nepal

Implementing Agency(ies)
Implementing Agency: Ministry of Physical Infrastructure and Transport
Implementing Agency: Ministry of Industry, Commerce and Supplies

V. FOR MORE INFORMATION CONTACT

The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 473-1000
Web: http://www.worldbank.org/projects

VI. APPROVAL

Task Team Leader(s): Sri Kumar Tadimalla, Deepak Man Singh Shrestha
Practice Manager (ENR/Social) Christophe Crepin Cleared on 05-Mar-2020 at 20:36:19 EST
Safeguards Advisor ESSA Agi Kiss (SAESSA) Concurred on 23-Mar-2020 at 01:05:14 EDT